



Who Will Receive a HEPA Vacuum?

EPA will provide a HEPA vacuum to every resident and commercial property in Libby where there is a potential for indoor dust contamination. This includes properties where vermiculite was found anywhere inside or outside in yards, gardens, flowerbeds, or driveways. The first people to receive a HEPA vacuum will be those whose properties EPA has cleaned up.

For properties that have not yet been cleaned up or that don't meet the criteria for cleanup, EPA will provide a HEPA vacuum only after dust samples are collected. This ensures that use of the vacuum will not affect the sample results and the resulting decision as to whether or not a cleanup should be done.

Even if a property does not meet the criteria for an EPA cleanup, there still

may be low levels of asbestos in the dust. Using a HEPA vacuum will minimize that problem.

The details of HEPA vacuum cleaner program may be adjusted in the future, as more information becomes available. EPA intends to conduct post-cleanup sampling to evaluate how cleanup and HEPA vacuums performed. A Superfund risk assessment may give EPA more information on the risk of asbestos in dust.

The HEPA vacuum cleaner program is voluntary, and property owners also have the option of purchasing their own HEPA vacuum now or in the future (including property owners that don't meet the general criteria for eligibility).

Status of the HEPA Vacuum Program

- EPA is currently determining eligibility and ordering the HEPA vacuums. This will take time and will be spread out over several years.
- EPA will contact eligible property owners about the units, either after cleanup or after sampling.
- Residents do not have to initiate the process.
- HEPA vacuums will be handed out at the EPA Information Center or provided after a cleanup is complete.
- The Information Center will have manufacturer's information on whom to contact for ordering parts, service, etc.
- A manufacturer's representative will hold an information session in Libby. This will be advertised when dates have been scheduled.



Libby Asbestos HEPA Vacuum Cleaner Program

EPA's objectives for cleanup actions in Libby are to:

1. Stop the ongoing release of Libby asbestos by removing or containing sources
2. Reduce health risks associated with exposure to Libby asbestos

EPA is accomplishing these objectives through a comprehensive response including:

- attic cleaning
- interior home cleaning
- outdoor soil removal
- distribution of vacuum cleaners with High Efficiency Particulate Air (HEPA) filters
- an ongoing Operations and Maintenance program in Libby



HEPA Vacuums as Part of the Overall Cleanup

EPA intends to clean each property only once by designing and implementing a cleanup that will address all potential issues. However, EPA recognizes that no cleanup program can eliminate *all* exposures, levels of risk, or possibilities for recontamination. Situations presenting lower levels of risk may be dealt with later through additional investigation and potential cleanup or by taking precautions.

Even after EPA's cleanup at a property is complete and Libby asbestos sources are removed or contained, some asbestos fibers may remain that could lead to a low-level or short-duration exposure to Libby asbestos.

The HEPA vacuums are another step in an already rigorous cleanup program, not a substitute for cleanup!

These remaining risks, while they cannot be accurately quantified, are generally low. The HEPA vacuums further reduce the already low risks and ensure the continued protectiveness of the EPA cleanup.

Examples of potential low-level or short-duration exposure to Libby asbestos include:

- vermiculite insulation in walls (a potential problem if the wall is slightly opened up – such as for a light fixture or electrical outlet)
- low levels of Libby asbestos remaining in dust or in textiles (couches or curtains)
- Libby asbestos present below carpets (a potential problem if carpet is removed)
- Libby asbestos sources not discovered at depth in soils (a potential problem if dug up)
- personal possessions that were not cleaned
- Libby asbestos tracked in from soils or other materials off the property

Why Use HEPA Vacuum Cleaners?

Standard vacuums *don't* filter out asbestos! The function of any vacuum is to remove dust and dirt from floors, furniture, or drapes. Vacuums draw in the dust and dirt and store it in either a bag or canister. The air that is taken in with the dust and dirt is pulled through the vacuum system and exhausted through the motor. Very small dust and dirt particles, such as asbestos fibers, can be drawn through the bag and canister and returned into the air.



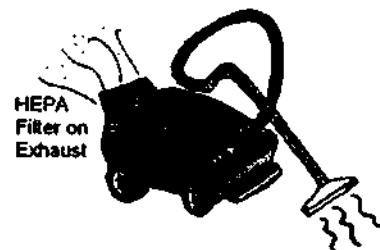
It is important to note that the HEPA vacuums EPA is providing are NOT intended for bulk removal of vermiculite insulation from attics or walls!

HEPA vacuums *do* filter out asbestos! So, use of HEPA vacuums in the living space will provide property owners with a cost-effective, easy-to-use tool with the following benefits:

- Short-term, periodic use will remove leftover contamination in dust that escaped EPA's cleanup. It will also quickly and effectively remove fibers present at such low levels that they did not trigger a large cleanup.
- Long-term, periodic use will help prevent recontamination from outside sources or from areas EPA did not clean up. While EPA believes such occurrences will be rare, the HEPA vacuum provides a practical way to address the issue with little effort, giving property owners additional assurance over time.
- Long-term, periodic use can address ongoing releases of non-Libby asbestos (generally chrysotile asbestos) from sources that EPA is not removing, such as pipe wrap, floor tiles, and ceiling tiles.
- One-time use can address situations where a small amount of Libby asbestos is introduced into the living space, such as when a wall is slightly opened up or when carpet is removed.

What is a HEPA Vacuum Cleaner?

A vacuum with a HEPA filter is used exactly the same way as a standard vacuum. Its construction is also almost identical to a standard vacuum. The only real difference between a HEPA vacuum and a standard vacuum is that a **HEPA vacuum filters the exhaust air of the motor using a HEPA filter.**



A HEPA filter is made up of hundreds of square feet of filter paper folded into a couple of square feet of space. These filters can remove 99.97% of all particles that are 0.3 microns in size or larger. The majority of Libby asbestos fibers are between 0.5 and 5 microns in size. For comparison, one inch contains about 25,000 microns.

This means HEPA vacuums, if used correctly, will successfully capture almost all of the fibers of concern in Libby.

Unlike some HEPA vacuum cleaners, the HEPA vacuum cleaners provided by EPA will have a fully-sealed containment area and filtration system. This ensures that *all* air, debris and lung-damaging particles pass through the vacuum bag and HEPA filter and do not exit out other areas of the vacuum cleaner.

In addition, the HEPA filter is located beyond the motor to ensure all air the motor draws in passes through it.

The HEPA vacuum cleaners provided by EPA will come complete with a floor attachment and hand tools.

Operation and Maintenance

The manufacturer's instructions will provide direction on how and when to change the bag and filter. **It is important to follow these instructions carefully so that the integrity and performance of the filter is maintained!**

The vacuum will be covered under the manufacturer's warranty. Instructions on how to register the vacuum for the warranty will be provided with the vacuum. All maintenance will be the responsibility of the homeowner.

Questions?

If you have any questions or concerns regarding the HEPA Vacuum Program, please call the EPA Information Center at 293-6194.